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ABSTRACT

This study was designed to determine the sources that undergraduate students use to fulfill mentoring needs and to assess whether gender, race, parental education, parental income, or student college level impact the selection and use of mentors. The research was conducted via surveys mailed to 699 students (546 on-campus and 153 off-campus) at Michigan State University (East Lansing) during the fall semester of 1992. Eighty-two surveys were analyzed using Chi Square contingency tables and Mann-Whitney and Kruskal-Wallis analyses. Results of the survey indicate that students primarily rely on individuals categorized as education related and friends for their mentoring needs; and that some differences do exist in responses due to gender, race, parental education/income, and college level. To confirm such conclusions, further study would be required. A discussion of the trends and their implications for further study is provided. (Contains 17 references.) (SLD)

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Sources of Mentoring Selected by Undergraduate Students at Michigan State University

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This study was designed to 1) determine what sources undergraduate students use to fulfill mentoring needs and 2) to assess whether gender, race parental education, parental income or student college level impact the selection and use of mentors. The research was conducted via mailed survey to a sample of students at Michigan State University during fall semester of 1992. Survey results were analyzed using Chi Square contingency tables, Mann-Whitney, and Kruskal-Wallis analysis. Results of the survey appear to indicate that students primarily rely on individuals categorized as education related and friends for their mentoring needs and that some differences do exist in responses due to gender, race, parental education/income and college level. To confirm such conclusions further study would be required. A discussion of the trends and their implications for further study is provided. Study results were part of a presentation at the 1993 National Conference on Student Retention in New Orleans sponsored by the Noel-Levitz Centers.

Introduction

Although much literature exists on the use of mentors in the career setting, much less study has been devoted to the use of mentors by college students. This descriptive study was designed to assess what sources undergraduate college students use to fulfill their needs for mentoring and whether certain variables impact the selection and use of mentors by students. Six basic assumptions underlie the study:

1. **There is a difference between having a mentor and being mentored.**

Having a mentor implies having one individual who fulfills all of our mentor functions in an intensive and lasting developmental relationship. Such relationships have received much attention and study in the career setting. However, being mentored means having a variety of individuals who fulfill the important psychological and career mentoring functions. Although it may not be possible to have individual mentors for everyone, it appears that institutional programs that allow individuals to be mentored by a diverse set of people can be extremely effective (Zemke, 1985). Kathy Kram (Kram, 1985) has identified five career functions of a mentor (sponsorship, exposure and visibility, coaching, protection, and challenging assignments). She has also identified four psychological functions of mentoring (role modeling, confirmation, counseling, and friendship).

2. **Mentoring during college can enhance the quality of faculty-student interactions and impact a student's successful transition to a career** (Brown and DeCoster, 1982)

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3. **Mentoring is not worshipping at the feet of a master. A mentor is a guide** to "lead us along the journey of our lives. We trust them because they have been there before. They embody our hopes, cast light on the way ahead, interpret arcane signs, warn us of lurking dangers and point out unexpected delights along the way" (Daloz, 1986, p. 17).

4. **Traditional middle class college students grow toward their parent's occupational world while at-risk college students (low SES, first generation college graduates) often grow away from their parent's occupational world.** Indeed, it is to open opportunities to their children that parents of at-risk students often work extremely hard to provide the advantage of a college education.

5. Universities often create elaborate academic support services (libraries, recitation sections, help rooms, paid tutors, academic advisors, resource centers, remedial courses, etc.) to assist students who are underprepared in academic skills. Thus providing a wide array of people from whom to select to secure what Kram refers to as career mentor functions However, **the counseling center is often the only institutional resource for difficulties in socialization to the university and one of the only sources of psychological mentoring functions** (Hamilton, 1991).

6. **The functions of mentoring that lead to successful socialization in the career setting can begin in school** (Phillips-Jones, 1982).

Project Description

Methodology

Subjects

The population to be studied consisted of undergraduate freshmen and seniors at Michigan State University---a large public, midwestern institution with a predominantly traditional, on-campus student body. A random sample stratified on gender, race (African American, Asian American, Caucasian, Hispanic, Native Americans) and college level (Senior and Freshman) was to be selected. However, selection of Native Americans was not random due to their limited number. The entire available population of freshmen and senior Native Americans was included. The entire available population of Hispanic, senior males was also included due to their limited number. The sample contained 699 undergraduate students, 546 on-campus and 153 off-campus students. The selection of the sample was performed by MSU staff with access to computerized registration data based on the variables identified by the researcher to further ensure the anonymity of the subjects. The variables of parental education and income were not systematically sampled and were self-reported on the survey instrument.

The breakdown of the sample by gender included 52% females and 48% males. By college level the sample contained 49% seniors and 51% freshmen. By race the sample contained 23% Caucasians, 23% African Americans, 23% Asian Americans, 21% Hispanics, and 10% Native Americans. Higher percentages of minorities were included in the sample than in the MSU population to insure representation among the respondents.

Procedure

Survey instruments were sent to students via campus and US mail during fall semester of 1992. Each mailing contained a cover letter (Attachment A) signed by Dr. Lee June, Assistant Provost for Student Academic Support Services and Racial, Ethnic and Multicultural Issues asking students to voluntarily and anonymously complete the questionnaire; a copy of the survey instrument (Attachment B) and a stamped (when off-campus), addressed return envelope. The instrument took approximately 20 minutes to complete and no incentives were offered to the participants. Two weeks after the initial mailing a follow-up letter was sent by the researcher, to all members of the sample thanking those who had returned the survey and requesting the others to do so.

Instrument

The instrument was based on Kathy Kram's model of mentoring functions adapted to the academic setting (Attachment C). Within the segment of Career mentor functions three questions were asked from each of the five areas (sponsorship, exposure and visibility, coaching, protection, and challenging assignments). Within the area of Psychological mentor functions three questions were asked from each of the three areas (role modeling, confirmation, and friendship) and seven questions were asked related to the counseling function as it covers a much broader area of concern. For each question students were asked to indicate if they would discuss the life situation described with anyone, with whom they would discuss it, how familiar they are with the person and how much experience they believe the person has in handling such life situations. The response for whether the student would discuss the situation was yes/no. A blank line was provided for students to indicate with whom they would discuss the situation. The student was requested to enter the category of individual. This was done rather than using a checklist to insure that the response was not merely whom they would select from the list as most appropriate but to whom they would actually speak. Responses for familiarity and experience used rating scales. The instrument was presented in booklet form bearing the insignia of MSU on its cover with directions printed on the first page.

The survey questionnaire was pilot tested on seven undergraduate students at Oakland University to determine its readability and the adequacy of the directions. The instrument was then reviewed by the Social Science Research Bureau at MSU to ensure its soundness as an instrument. The survey was reviewed by the MSU University Committee on Research Involving Human Subjects. The committee appropriately suggested that some method be used to ensure assistance to any student who may have

experienced a trauma in the past and who may have become upset by one of the questions as a result. The researcher suggested the inclusion of the number of the MSU Counseling Center at the end of the questionnaire which was easily and immediately completed. However, mailing of the survey was delayed by one month because the full UCRIHS committee did not meet again until the following month to give its approval.

Results

Survey Returns

The survey return rate was low (13%). The researcher believes this was due to the one month delay in committee review of the instrument which pushed the mailing of the questionnaires into the fall term pre-Christmas holiday and pr-exam timeframe. Unfortunately, the survey could not be postponed until winter semester as its aim was to capture data from incoming freshmen. Of the surveys returned some were also discarded as the students responding indicated that they were sophomores (apparently listed in registration data as freshmen due to lack of completion of a few credits). The usable N for the survey was 82. The breakdown by gender was 62% female and 38% male. By race the sample contained 11% African Americans, 27% Asian Americans, 39% Caucasians, 17% Hispanics, and 6% Native Americans. By class it was 38% freshmen and 62% seniors. By parental education the sample was 3% primary school, 3% some high school, 20% high school graduates, 23% 1-2 years college, 24% 3-4 years college, 27% 5+ years of college. By total parental income the sample was 8% level 1, 7% level 2, 24% level 3, 28% level 4, 15% level 5, and 18% level 6.

With Whom Students Would Discuss Situations

As indicated above, an open response was allowed for the question of who students would select for discussion of a situation. Therefore, after responses were gathered they were grouped into the following categories for analysis purposes:

I. Family
   - A. Parent
   - B. Sibling
   - C. Spouse
   - D. Child
   - E. Other Family Member (Aunt, Uncle, Etc.)
   - F. General Family Reference

II. Work Related
   - A. Boss
   - B. Co-worker
   - C. Subordinate

III. Education Related
- A. Former Instructor
- B. Current Instructor
- C. Administrator
- D. Advisor
- E. Tutor
- F. Other Campus Staff (Financial Aid Officer, Etc.)
- G. Classmate [peer]
- H. Classmate [upperclassman]
- I. Other Academic

IV. Service Worker
- A. Counselor/Psychologist
- B. Health Professional (Non-psychological)
- C. Police
- D. Legal Advisor
- E. Religious Figure
- F. Other Service Personnel

V. Friend
- A. Romantic
- B. Non-romantic

VI. Blank/Don't Know

VII. Living Related
- A. Resident Assistant
- B. Roomate/Suitemate
- C. Housemate
- D. Sorority Sister
- E. Fraternity Brother
- F. House Parent

VIII. Non-Faculty Experienced in Career/Major
- A. Alumni
- B. Other

IX. No One

X. Anyone Who Will Listen

XI. Other Professionals

Outcomes

A summary of data for each of the survey questions is contained in Tables 1-31 (Attachment D).

Results By Hypotheses

Null Hypothesis 1: Would Discuss

There is no difference based on a student's gender, race, parental income/education or student's college level in the likelihood that an undergraduate student will seek out discussion about a life situation with a mentor

Results by individual questions

Significant differences (Chi Square) were found by gender, race, parental education, parental income and college level in whether a student would discuss individual life situations. Questions with significant differences included:

Gender (4,5,11,12,15,18,21,24,26,27,28,29,30)
Race (12,28,31)
Parental Education (5)
Parental Income (16,17)
College Level (3,4,9)

Result across questions

Mann-Whitney analysis showed a significant difference across questions in whether a student would discuss situations by gender (p= .0009)

Null Hypothesis 2: Familiarity

There is no difference based on a student's gender, race, parental income/education or student's college level in the level of comfort (familiarity) an undergraduate student experiences in discussing a life situation with a mentor.

Results by individual questions

Significant differences (Chi Square) were found by student's gender, parental education, parental income and college level for a limited number of survey questions. No significant difference was found for race.

Gender (2,4)
Parental Education (23)
Parental Income (3)
College Level (1,2)

Results across questions

Mann-Whitney analysis showed no significant differences across questions in familiarity by gender (p=.18), or college level (p=.08). Kruskal-Wallis analysis showed no significant differences across questions in familiarity by race (p=.28), father's education (p= .86), mother's education (p= .30), or parental income (p=.47)

Null Hypothesis 3: Experience

There is no difference based on a student's gender, race, parental income/education or student's college level in the perceived level of experience of the mentor that an undergraduate student selects for discussion of a life situation.

Results by individual questions

Significant differences (Chi Square) were found by student's race, parental education, parental income and college level on a limited number of questions. No significant difference was found for gender in individual questions.

Race (1,5,8)
Parental Education (2,4,8,16,22,26,28)
Parental Income (16)
College Level (27)

Results across questions

Mann-Whitney analysis showed no significant difference in familiarity across questions by gender (p= .72), or college level (p= .57). Kruskal-Wallis analysis showed no significant difference in familiarity across questions by race (p= .39), father's education (p= .20), mother's education (p= .26), or parental income (p= .81)

Null Hypothesis 4: Who

There is no difference based on a student's gender, race, parental income/education or student's college level in the category of individual whom an undergraduate student selects to discuss a life situation

Results of Survey

Significant differences (Chi Square) were found by gender, race, parental education, parental income and college level in whether a student would discuss some individual questions.

Gender (5,18,20,24,28,31)
Race (24,31)
Parental Education (20)
Parental Income (24)
College Level (2,3,9)

Null Hypothesis 5: Areas

There is no difference based on a student's gender, race, parental income/education or student's college level in the functional life areas (Kram's mentoring areas) for which an undergraduate seeks out a mentor for discussion.

Results of Survey
Examination of all questions exhibiting significant differences shows:

Gender (2,4,5,11,12,15,18,20,21,24,26,27,28,29,30,31)
Mentoring areas represented by questions showing significant differences include: *sponsorship, exposure and visibility, coaching, role modeling, acceptance and confirmation, and counseling.*

Race (1,5,8,12,24,28,31)
Mentoring areas represented by significant questions include: *sponsorship, exposure and visibility, coaching, protection, acceptance and confirmation, and counseling.*

Parental Education (2,4,5,8,16,20,22,23,26,28)
Mentoring areas represented by significant questions include: *sponsorship, exposure and visibility, coaching, friendship, acceptance and confirmation.*

Parental Income (3,26,17,24)
Mentoring areas represented by significant questions include: *friendship, acceptance and confirmation*

College Level (1,2,3,,4,7,9)
Mentoring areas represented by significant questions include: *sponsorship, exposure and visibility, and coaching*

Other Trends

Parental Education

On many questions students with parents whose education levels are primary or some high school show that 50% or more would not discuss a situation (3,5,6,9,10,11,12,13,16,17,18,19,20,22,23, 24,25,26,27,28,29,30,31)

Additionally, on some questions large percentages of students, whose parents had primary or some high school education,who say they would discuss a situation do not know with whom they would discuss it.

Parental Income

Some questions (5,16,18,20,23,24) show that students whose parental incomes are the lowest, at level 1, would not discuss these situations while those whose parents are at income levels 2,3,4, and 5 would discuss them.

Race

On questions 24,25,28, and 31 African Americans show either lower percentages of students who would discuss the items or a majority who would not discuss them. On questions 24,25,28, and 29 Native Americans show either lower percentages of students who would discuss the items or a majority who would not discuss them.

Low percentages of Asian (54%) and Caucasian (50%) students would discuss it if a professor made a racial slur in class (Hispanics 93%, Native Americans 80%, and African Americans 100%). Only 50% of Caucasian students would seek out someone to talk to about wanting to learn about another race (Hispanics 64%, Native Americans 60%, Asian Americans 77%, and African Americans 100%).

The categories of individuals that students select to discuss situations

Students appear to place primary reliance on persons in the *education related category for career mentoring functions* (sponsorship, exposure and visibility, coaching, and protection) and for challenging assignments and role modeling. (An exception to this pattern are students whose parents fall into the two lowest educational categories and the lowest income level. These students select a variety of sources for these functions and select education related less frequently.)

Students appear to place *high reliance on friends* for counseling questions and some affirmation questions related to the *psychological functions of mentors.*

Discussion

Prior to discussing the results, the researcher wishes to identify two philosophical assumptions that underlie this analysis. First, if the university mission related to students is seen as one of development rather than screening, it becomes natural to create an environment that incorporates the resources that can foster the growth of the entire individual and ensure his/her retention. This viewpoint will of necessity become predominant as we struggle to adapt to the diverse student population of the future. This view is not synonymous with a loss of quality in programs or students. It is a recognition that the student body is no longer homogeneous and that quality programs are what must be developed to ensure that the future students who graduate from our universities have the opportunity to achieve the standards expected. Second, if the university's role is the development of not only knowledge but wisdom, then the focus of student development will broaden to include not only the Career functions of mentoring but also the Psychological functions of mentoring and socialization. Nicholas Maxwell has written "We urgently need a new, more

rigorous kind of inquiry that gives intellectual priority to the tasks of articulating our problems of living and proposing and critically assessing possible cooperative solutions. This new kind of inquiry would have as its basic aim to improve, not just knowledge, but also personal and global wisdom---wisdom being understood to be the capacity to realize what is of value in life" (Maxwell, 1992). This perspective will require new ways of addressing the student learning environment. It will require not just the reintegration of values into the curriculum but the development of a learning community--a total environment that fosters critical thinking and decision-making in students with respect to all aspects of their lives. Secretary of Labor Robert Reich has noted that the most important skills for employees of the new century will be the symbolic-analytic skills of abstraction, systems thinking, experimentation, and collaboration (Reich 1991). He points out that a lucky few students are exposed to these skills throughout their childhood in their home environment but that many young people are not so lucky. Universities may no longer have the luxury of assuming that students have the background and skills to place the knowledge they learn within a broader context. The skills of the symbolic-analyst will need to be taught within the learning community of the university.

Because this survey had a low response rate, it is not possible to draw firm generalizations to the larger population. However, the survey represents some interesting trends among the students answering it. A number of questions arise from the results. These questions and concerns will be discussed and possibilities for future research will be identified.

First, it appears from the survey that males are less likely than females to seek out discussion about life situations across a range of questions. Our society prizes self-sufficiency. However, the question arises whether this trend among undergraduate students, if confirmed, is positive or negative for young males. Many of the situations described in the questionnaire, such as depression, the questioning of personal values, and the use of non-prescription drugs, would appear to be of such importance that some discussion would prove beneficial. Further research may help to determine why young males are less willing to discuss such life situations. This also leads to consideration of services and how opportunities for discussion and Psychological mentoring functions can be incorporated into the environment of male students in ways that they will accept and use. A related concern needing further research is the question of whether this trend creates a greater lack of mentoring among at-risk male students than female students.

The survey also appears to show that across questions and mentoring categories students seek out people who are familiar to discuss situations. Familiarity might be seen to have three dimensions here, physical (proximity), psychological (accessibility), and cultural (similarity). In his review of support programs at MSU (Hamilton 1991), James Hamilton describes the past history of student support services citing elements such as the library, recitation sections, help rooms, academic advising, the LRC

and Counseling Center. Most of these early services were based on a model in which they were centrally located on campus (although some, such as the Office of Financial Aids, ran workshops in residence halls). Hamilton goes on to describe the current configuration of services, many of which began in the 1960s and 1970s to assist minority and handicapper students. These newer programs such as the Engineering Equal Opportunity Program, College of Natural Science Project TAC and Charles Drew Science Enrichment Program, Office of Minority Business Programs, and the College of Arts and Letters Remedial-Developmental-Preparatory Courses are more fully integrated into the the colleges and academic units. Even those newer services that are designed to be campus-wide appear to have embraced a model that puts their services closer to students. This shift toward proximity, accessibility, and cultural diversity appears to be supported by the students' desire for mentoring by persons seen as familiar. However, the majority of these services still focus on the provision of services related to the Career functions of mentoring. One model for the provision of Psychological mentoring functions that are more 'familiar' to students is MSU's Multi-Ethnic Counseling Center Alliance (June, Curry, & Gear, 1990). The MECCA arrangement also appears to be supported by the students' desire for familiarity with those whom they would discuss life situations. Survey results would support bringing counseling center services closer to students through residence hall and living unit programs, and the use of peers as well.

This brings us to a third trend in the survey data. Students appear to select primarily education related individuals for Career mentor functions. Thus, it becomes important for students to feel comfortable with the discussion of their needs with faculty and other academic personnel. The designation of education related personnel as mentors of choice by the students in the survey, if confirmed, would support the success of the above models for academic support services. Of possible concern, however, are students whose parents' education is at the 'primary' or 'some high school' levels (apparent first generation college students). It appears that these students are less likely to discuss certain types of life situations and to have a less clear idea of whom they would talk to. They appear to choose education related persons less often for Career mentor functions than their counterparts. The question arises as to how educational personnel can be seen by these students as more accessible and familiar. Other questions also arise even though the majority of students appear to be familiar with and seek out mentor functions from education related personnel. They include: Do students primarily seek out instructors for all career mentor functions? If so, how well are instructors trained to provide such services? Are instructors able to recognize students with particular mentoring needs and to readily refer them to other campus services?

With regard to Psychological mentoring functions a new pattern emerges. Students appear to rely heavily on friends for the Psychological mentoring functions of counseling; and they rate these friends as experienced. Several questions present themselves: Are students turning

to friends because a) unlike academic support services, psychological services are seen as less accessible, physically close, or culturally friendly or because b) less attention is paid to the Psychological mentoring functions on campus and fewer services are provided or because c) there is a stigma attached to seeking such services? Another area of interest is the student view that their friends are experienced in handling these life situations. A friend may have experienced the loss of a significant other but the question arises as to whether this makes the individual the best guide for the student. Within this context we can return to our originally statement about it appearing less likely that males would discuss many items in the survey. For the Psychological mentoring functions, although they would be more likely to discuss an item, many times females are more likely to list friends as the persons with whom they would discuss. Therefore, although unlike males they would discuss an item, the source of female mentoring may not be the one that is most useful. Further study also appears warranted to determine the relationship of the Psychological mentor functions to student retention.

Finally, if the survey results are confirmed, it appears that Caucasian students are less likely to report an incidence of racism or to seek out opportunities for learning about other races than their counterparts. Questions arise: Why do these students feel less compelled to act? How can Caucasian students be encouraged to be proactive about racism and recognize it is a problem for all students? How can Caucasian students be encouraged to seek out opportunities for understanding people of other races?

Recommendations

The researcher would suggest four major recommendations based on the survey data. First, further research is needed to determine if the trends identified in this limited sample are confirmed. Second, a broadening of services that address Psychological mentoring functions that aid socialization appears to be in order with a focus on ways of providing such services that make personnel more 'familiar' and 'user friendly' to the students. Third, an expanded focus on programs that bring students together to discuss racism in ways that will engage Caucasian students in the dialogue appears to be needed. Finally, there needs to be a focus on what Nicholas Maxwell calls philosophy-of-wisdom inquiry within university courses, an approach that teaches students to think critically about how the knowledge they are learning impacts the world and all aspects of their lives. Such a focus would assist students to think critically about the underlying assumptions they have learned prior to attending university.

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